

TABLE 4.--Classification of vegetal covers as to degree of retardance

Note: Covers classified have been tested in experimental channels.
 Covers were green and generally uniform.

Retardance	Cover	Condition
A	Weeping lovegrass.....	Excellent stand, tall, (average 30 inches)
	Yellow bluestem Ischaemum...	Do tall, (average 36 inches)
B	Kudzu.....	Very dense growth, uncut
	Bermudagrass.....	Good stand, tall, (average 12 inches)
	Native grass mixture (little bluestem, blue grama, and other long and short mid-west grasses).....	
	Weeping lovegrass.....	Good stand, unmowed
	Lespedeza sericea.....	Good stand, tall, (average 24 inches)
	Alfalfa.....	Good stand, not woody, tall (average 19 inches)
	Weeping lovegrass.....	Good stand, uncut, (average 11 inches)
	Kudzu.....	Good stand, mowed, (average 13 inches)
C	Blue grama.....	Dense growth, uncut
	Crabgrass.....	Good stand, uncut, (average 13 inches)
	Bermudagrass.....	Fair stand, uncut (10 to 48 inches)
	Common lespedeza.....	Good stand, mowed (average 6 inches)
	Grass-legume mixture--summer (orchard grass, redtop, Italian ryegrass, and common lespedeza).....	Good stand, uncut (average 11 inches)
D	Centipedegrass.....	
	Kentucky bluegrass.....	Good stand, headed (6 to 12 inches)
	Bermudagrass.....	Good stand, cut to 2.5-inch height
	Common lespedeza.....	Excellent stand, uncut (average 4.5 inches)
E	Buffalograss.....	Good stand, uncut (3 to 6 inches)
	Grass-legume mixture--fall, spring (Orchardgrass, redtop, Italian ryegrass, and common lespedeza).....	
	Lespedeza sericea.....	Good stand, uncut (4 to 5 inches) After cutting to 2-inch height. Very good stand before cutting.
	Bermudagrass.....	Good stand, cut to 1.5 inches height
	Bermudagrass.....	Burned stubble.

TABLE 5.--Guide to selection of vegetal retardance

Stand	Average length of vegetation	Degree of retardance	Stand	Average length of vegetation	Degree of retardance
Good.....	Longer than 30" 11 to 24" 6 to 10" 2 to 6" Less than 2"	A B C D E	Fair.....	Longer than 30" 11 to 24" 6 to 10" 2 to 6" Less than 2"	B C D D E

TABLE 6.--Source of experimental results presented in figures 19 to 22

Identification number	Source ¹	Channel	Expt.	Date
1.....	a	U6	3	Fall, 1945
2.....	a	U4	1	Fall, 1945
3.....	a	U2	2	Fall, 1945
4.....	b	B2-9	2	Fall, 1939
5.....	b	B2-14B B2-10B	1	Summer, 1940 Summer, 1941
6.....	c	1D, 4D, 7B	1	Fall, 1943
7.....	a	U6	1	Fall, 1944
8.....	c	2C, 4B	1	Fall, 1943
9.....	c	1D, 2D, 4B, 7F, 10D	1	Fall, 1940
10.....	b	B2-9	1	Fall, 1938
11.....	a	U5	3	Fall, 1945
12.....	a	L1A FC3B	2	Fall, 1945
13.....	b	B2-6	1	Fall, 1938
14.....	b	B2-5	1	Fall, 1938
15.....	b	B2-16B B2-12B	1	Summer, 1940 Summer, 1941
16.....	b	B1-4	1	Fall, 1939
17.....	d	-	-	Summers, 1943-44
18.....	a	U3	3	Fall, 1945
19.....	c	Results from a group of channels varying in slope from 1 to 10 percent		Fall, 1942
20.....	b	B2-15B	1	Summer, 1940
21.....	b	B2-12C B2-16C B2-16A	1	Spring, 1941 Spring, 1940 Fall, 1940
22.....	b	B2-14A	1	Fall, 1940

¹ Source

Investigator

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- c Oklahoma A & M Agricultural Experiment Station, Stillwater, Okla.
- d Soil Conservation Experiment Station, Soil Conservation Service, Research Project, Columbia, Mo.

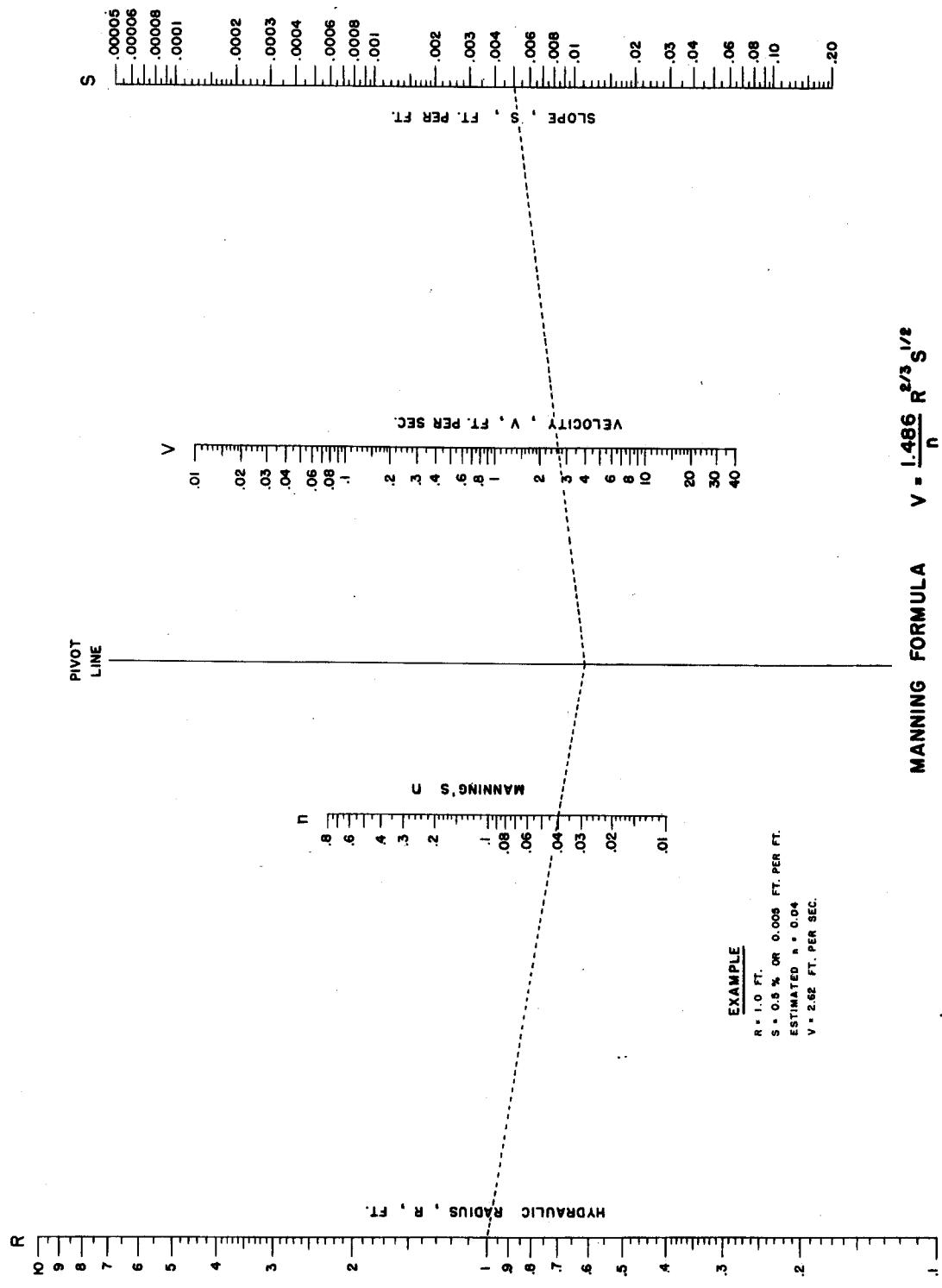
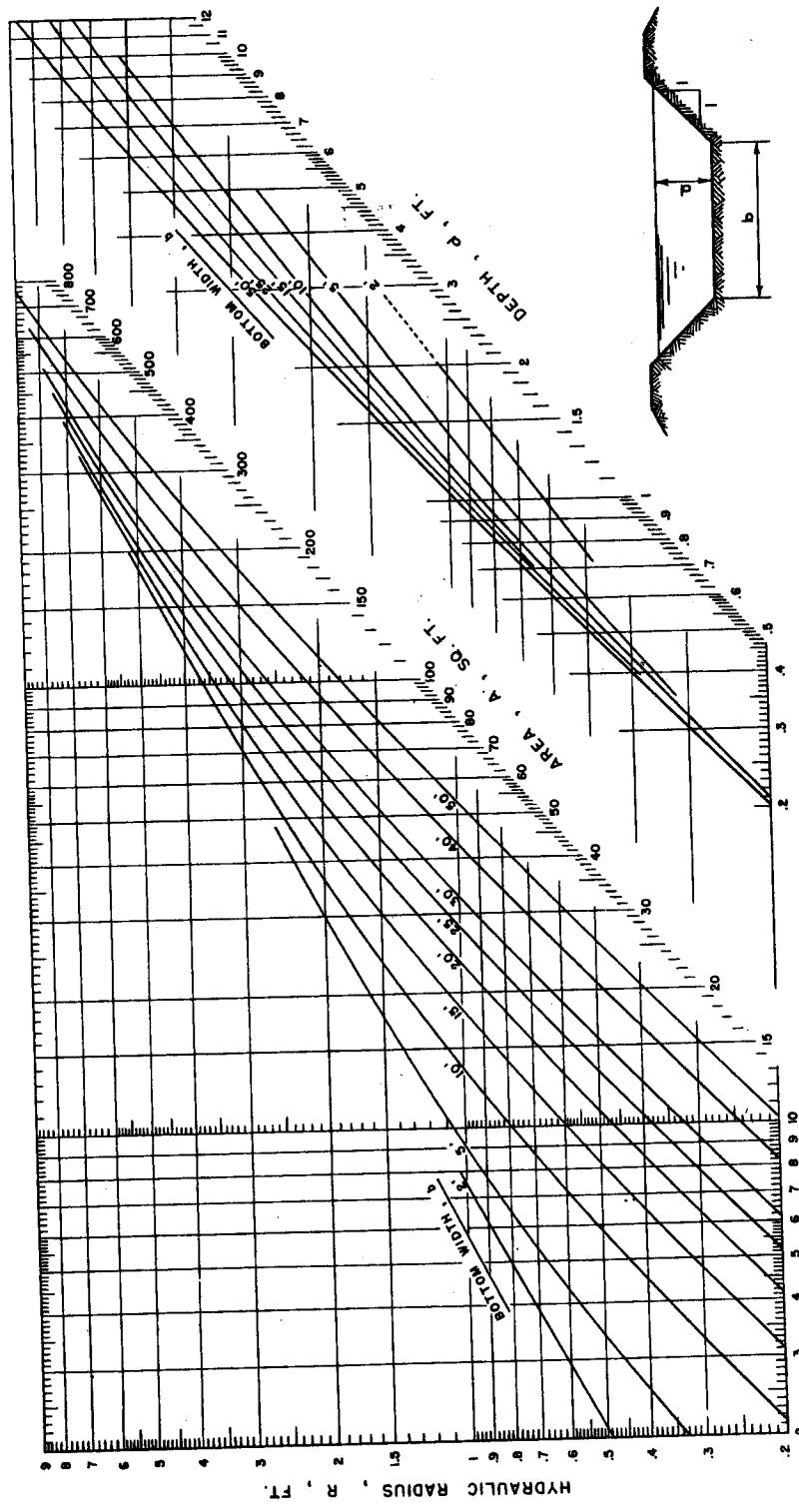


Figure 1.—Solution of the Manning formula.

Figure 2.—Dimensions of trapezoidal channels with 1 to 1 side slopes.



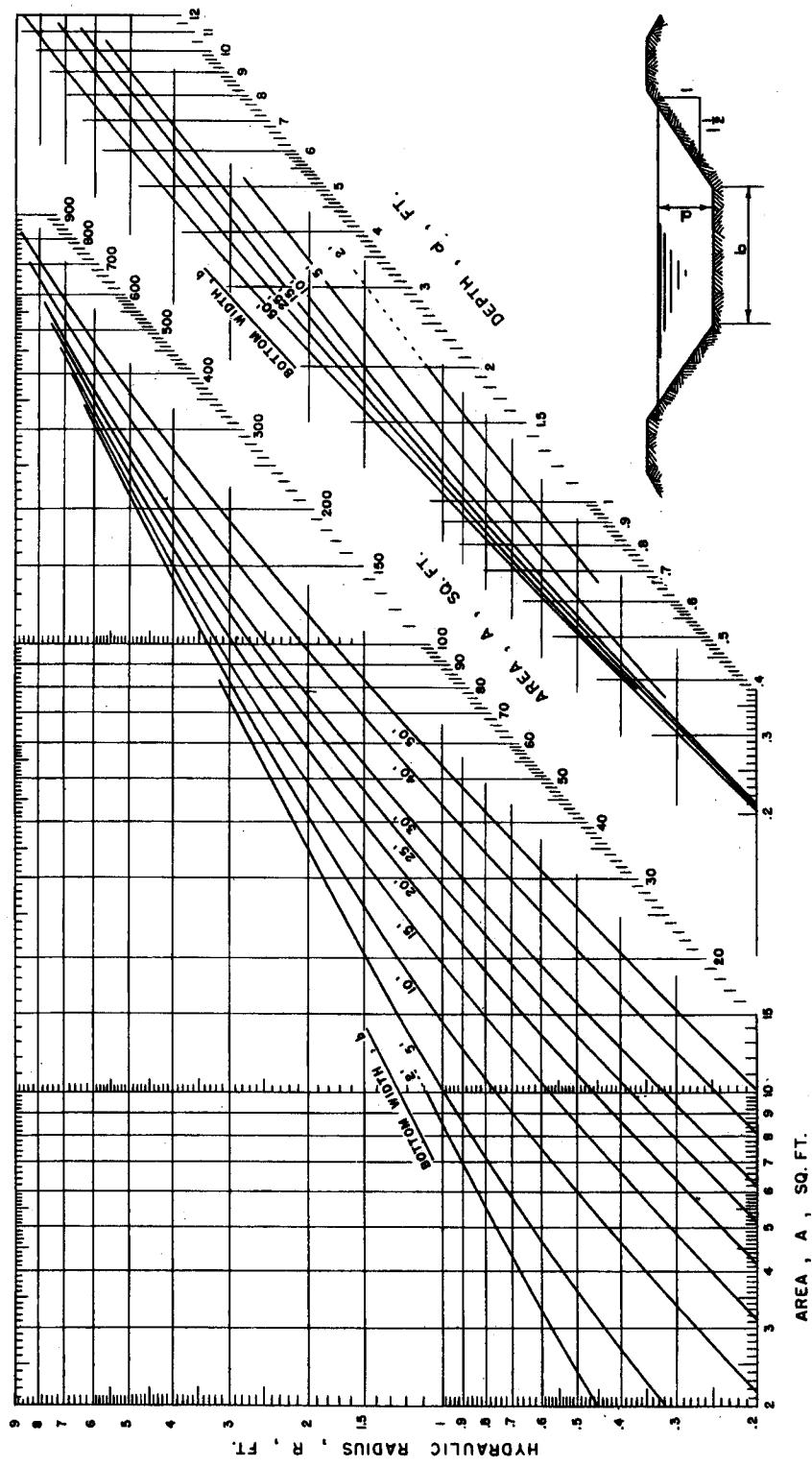


Figure 3.-Dimensions of trapezoidal channels with 1-1/2 to 1 side slopes.

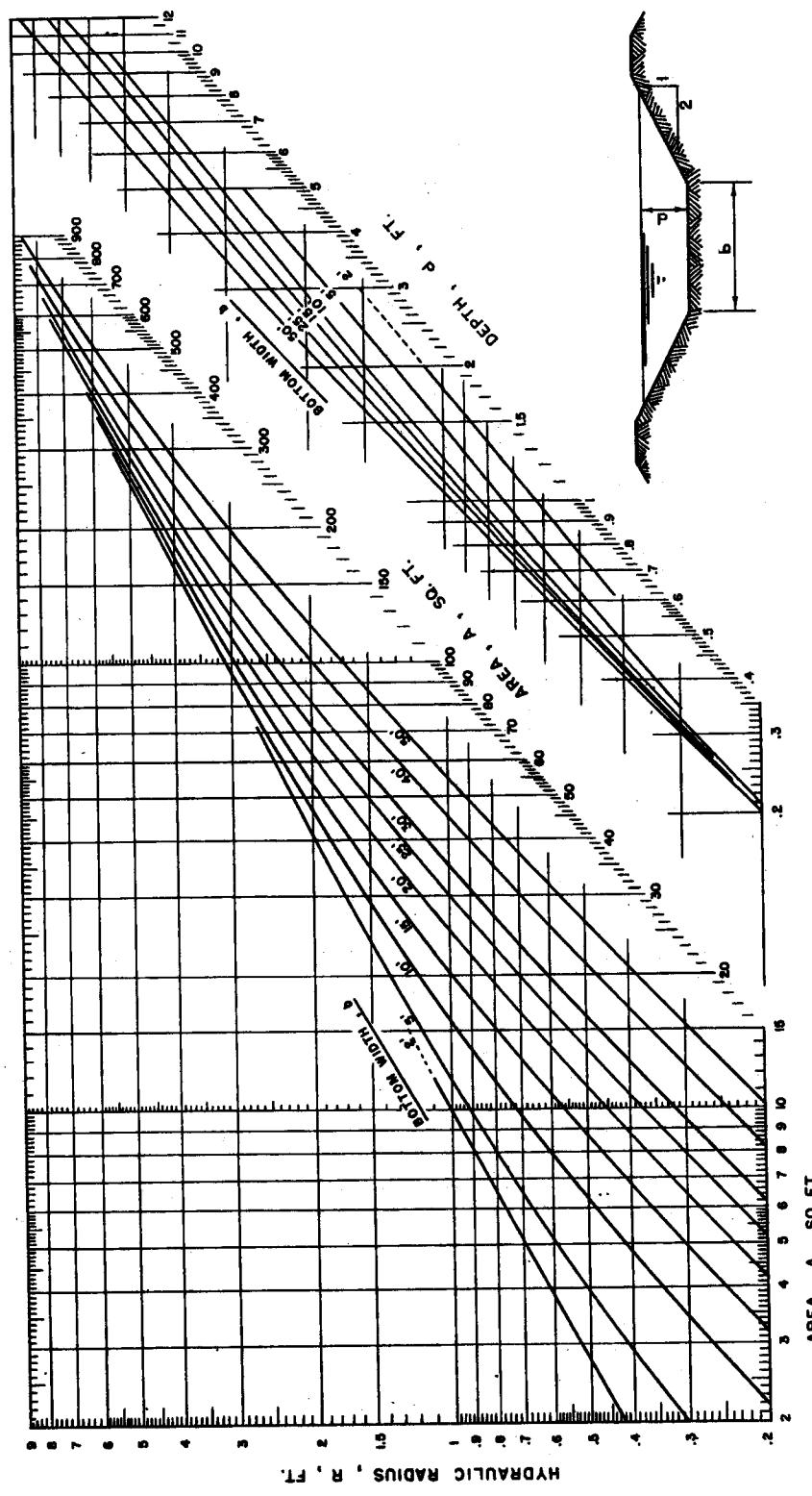


Figure 4.-Dimensions of trapezoidal channels with 2 to 1 side slopes.

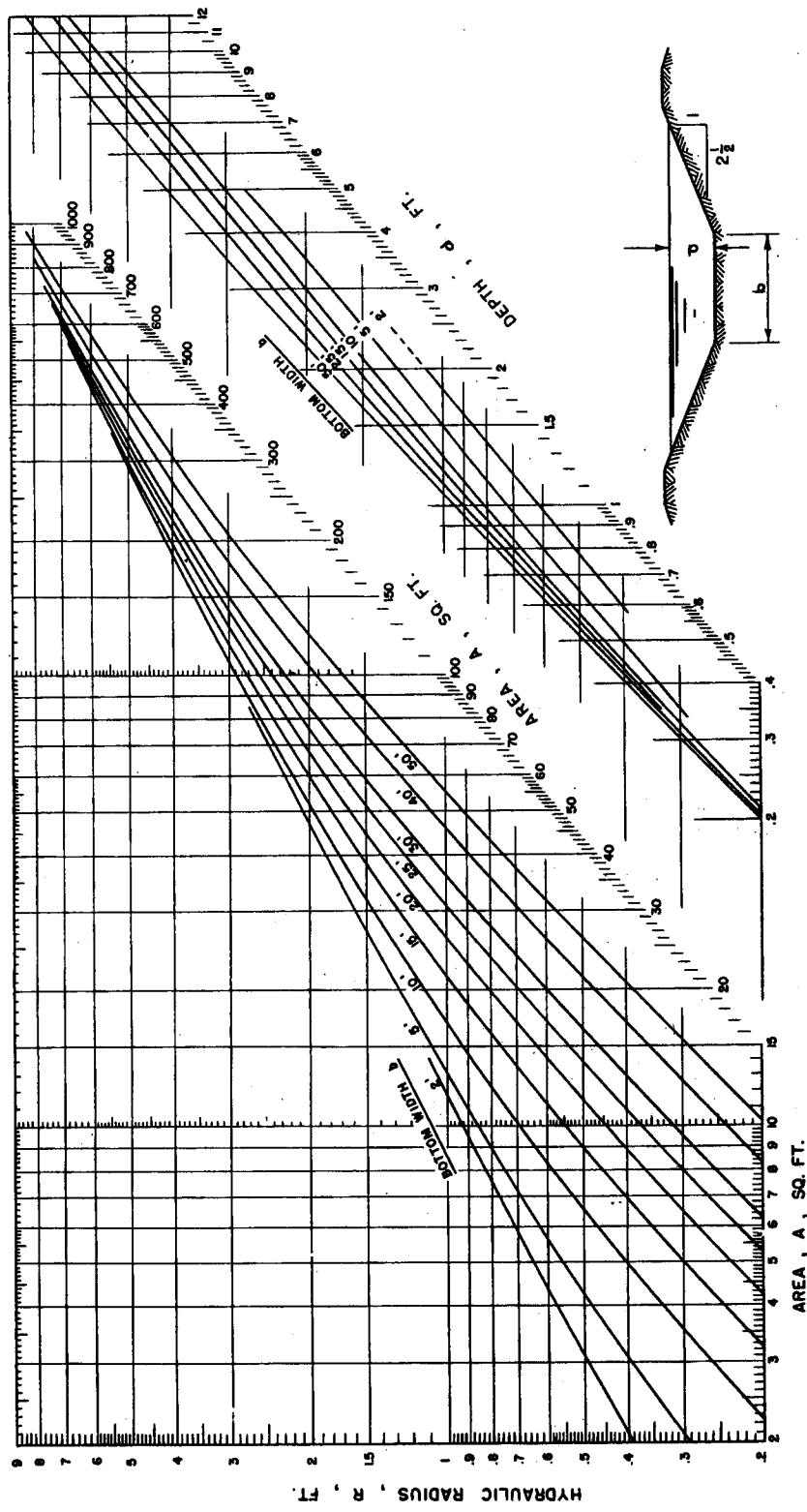


Figure 5.--Dimensions of trapezoidal channels with 2-1/2 to 1 side slopes.

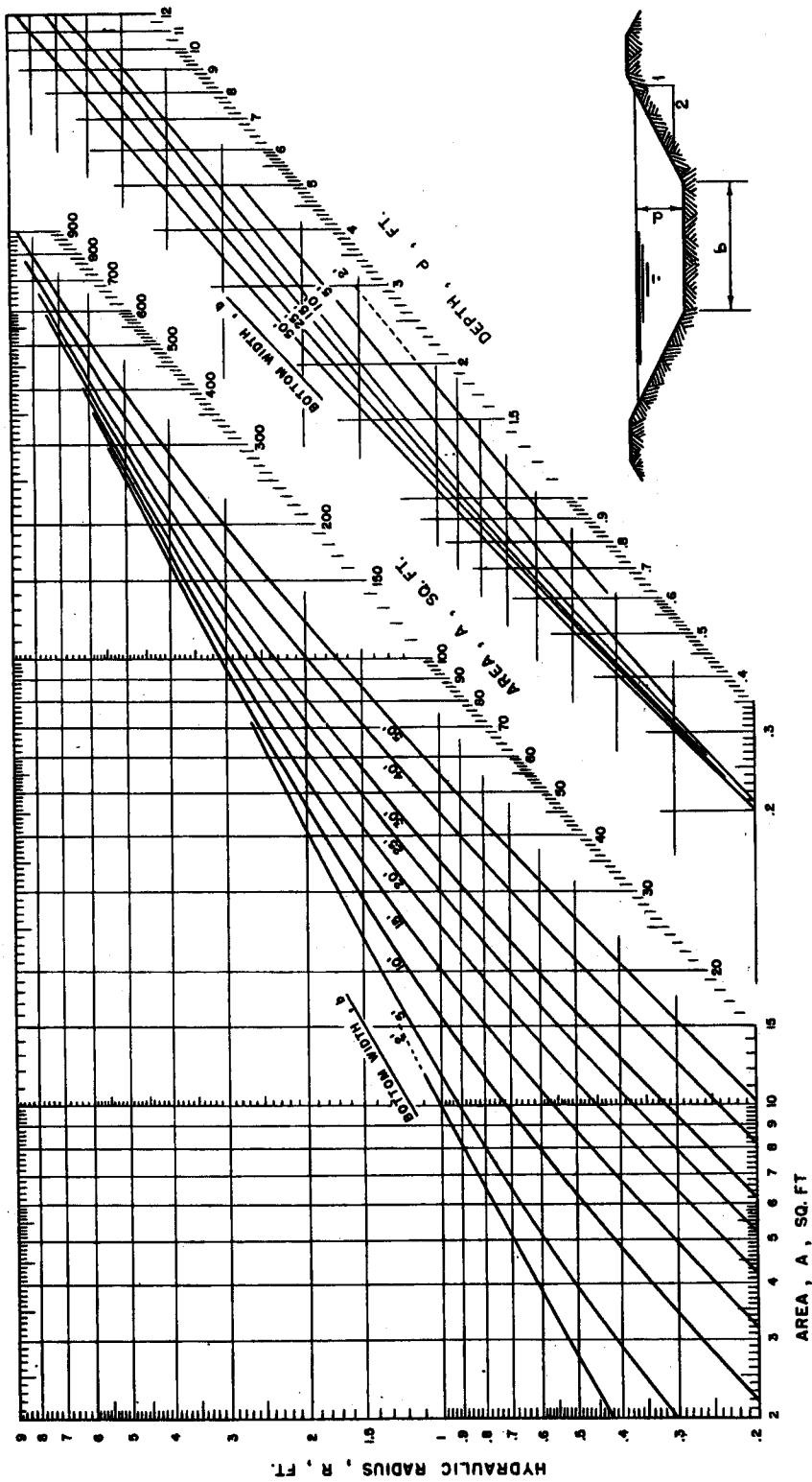


Figure 4.--Dimensions of trapezoidal channels with 2 to 1 side slopes.

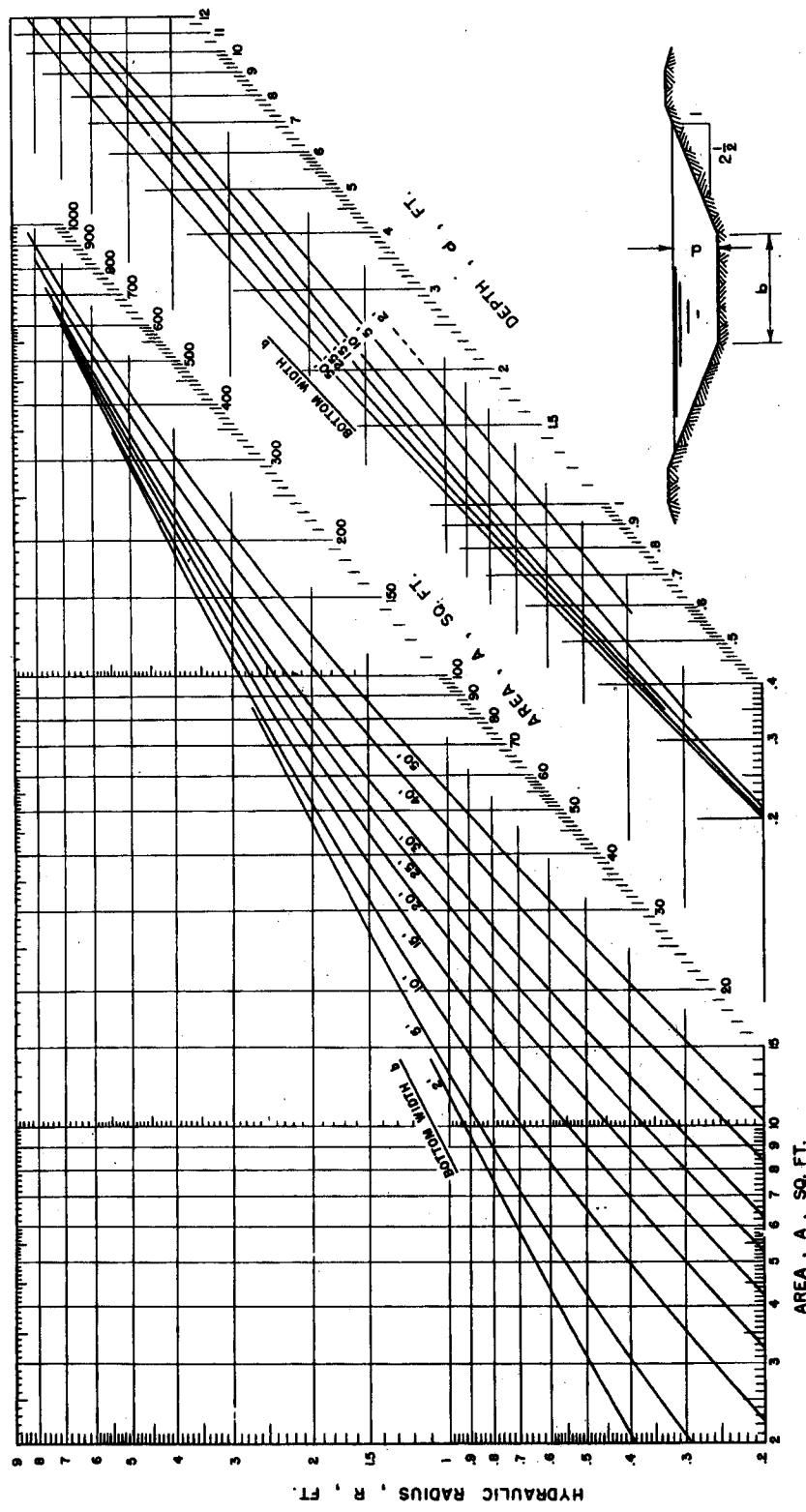


Figure 5.--Dimensions of trapezoidal channels with 2-1/2 to 1 side slopes.

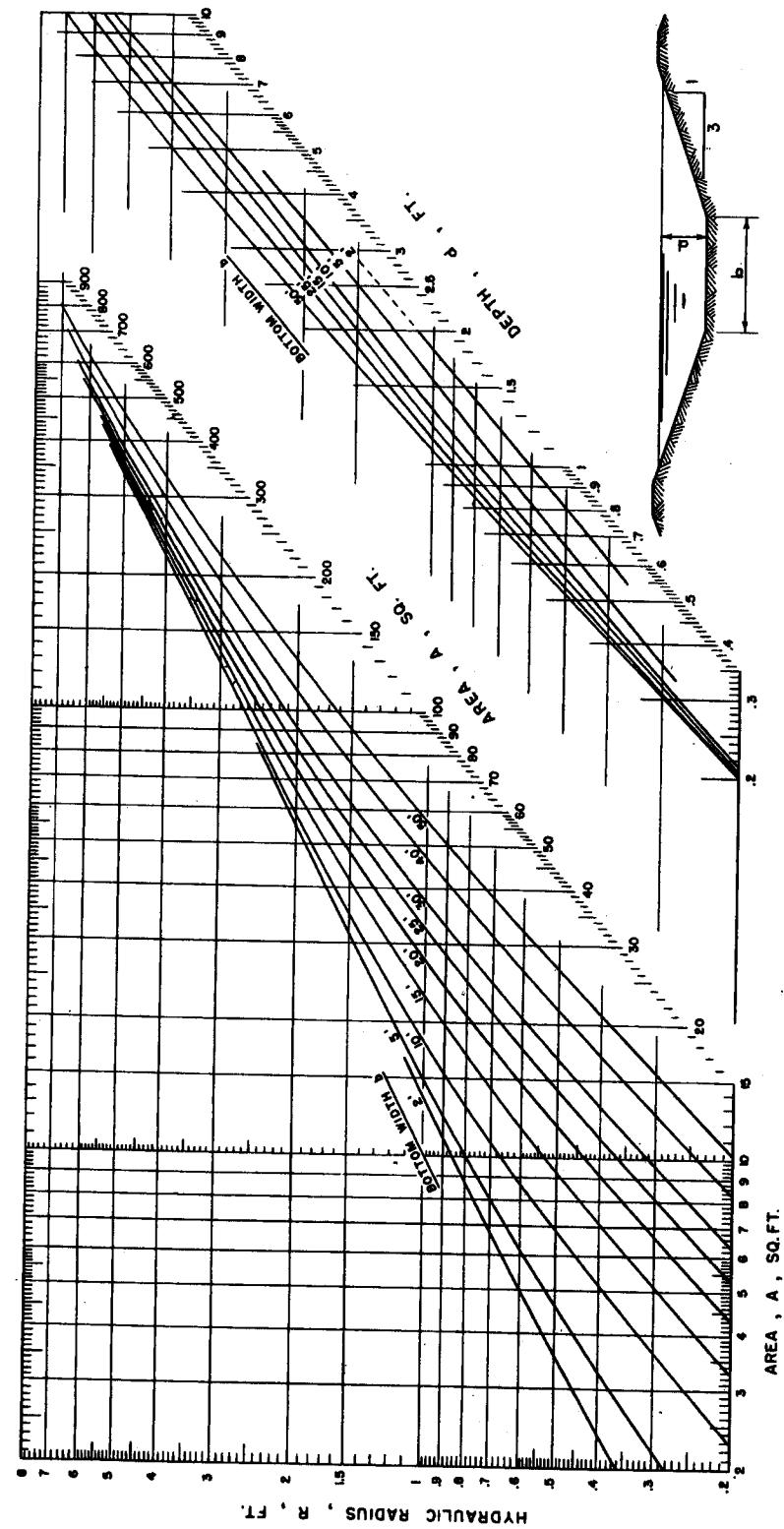


Figure 6.--Dimensions of trapezoidal channels with 3 to 1 side slopes.

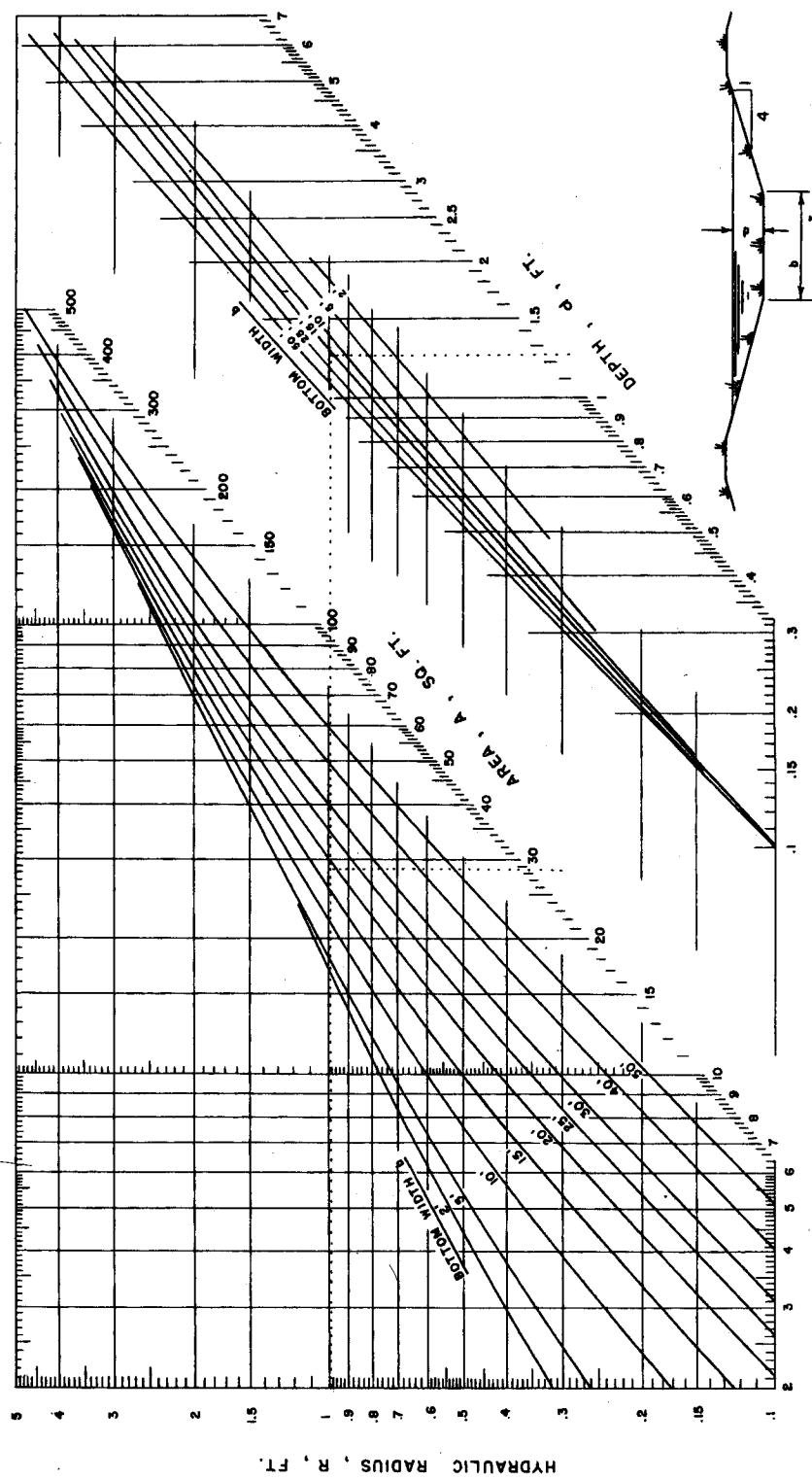


Figure 7.--Dimensions of trapezoidal channels with 4 to 1 side slopes.